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Proposed programme budget for the biennium 2010-2011

Report on the enterprise content management and customer relationship management systems and proposal for a unified disaster recovery and business continuity plan

Revised estimates relating to the proposed programme budget for the biennium 2010-2011 under sections 28D, Office of Central Support Services, 29, Office of Information and Communications Technology, and 36, Staff assessment

Report of the Secretary-General

Summary

The present report is submitted in response to the request of the General Assembly in paragraph 26 (e) of section II of its resolution 63/262, to provide an update on the implementation of the enterprise content management (ECM) and the customer relationship management (CRM) systems. The report provides the overall context for the implementation of both ECM and CRM systems and highlights their synergies with each other as well as their relationship to the enterprise resource planning (ERP) project (Umoja). The goals, rationale and benefits of each project are presented together with plans for phased implementation throughout the United Nations Secretariat, including offices away from Headquarters, the regional commissions, peacekeeping and political missions, and other field missions.

The report also responds to the request of the General Assembly in paragraph 13 of section IV of the same resolution, which called for a report on data storage and business continuity services, drawing on the experience of other United Nations entities and global developments in information and communications technology (ICT). It presents a framework for a unified approach to disaster recovery and business continuity for ICT, highlights the principles that will guide the refinement of the strategy for an Organization-wide disaster recovery and business continuity

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plan, and lastly, puts forth an action plan outlining the processes, timelines and resource requirements, for delivery of a comprehensive plan to address the requirements of the Secretariat as a whole.

A summary of the resource requirements for the ECM, CRM and disaster recovery and business continuity proposals are presented in section IV of the report.

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I. Introduction

1. In his report entitled "Investing in information and communications technology: information and communications strategy for the Secretariat" (A/62/793 and Corr.1 and Add.1), the Secretary-General presented his vision of a "strong information and communications technology for a better United Nations". To implement this vision, the Office of Information and Communications Technology was established in January 2009 and has committed to move towards a coherent environment of harmonized development and implementation of information and communications technology (ICT) systems.

2. In a separate report entitled "Information and communications technology: enterprise systems for the United Nations Secretariat worldwide" (A/62/510/Rev.1), the Secretary-General presented proposals for the phased implementation and deployment of a new generation of enterprise systems, including an enterprise-wide system for managing the Organization's information and knowledge (enterprise content management (ECM)) and an enterprise-wide system for managing day-to-day services (customer relationship management (CRM)). Building an ICT architecture that can accommodate enterprise systems such as ECM, CRM and enterprise resource planning (ERP) is crucial because, while different in focus, these enterprise applications must work together to support the mission and programmatic activities of the Secretariat.

3. In General Assembly resolutions 63/262 and 63/269, the need for appropriate disaster recovery and business continuity planning was emphasized. The Secretary-General was also requested to consolidate systems in central data centres in order to strengthen disaster recovery and business continuity and to minimize the size of local primary and secondary data centres.

4. The present report is submitted as a follow-up to earlier reports (A/62/477, A/62/510/Rev.1 and A/62/793 and Corr.1 and Add.1) and in response to General Assembly resolutions 63/262 and 63/269. The report provides an overall context for ECM, as the fundamental technological enabler for a knowledge management programme and a proposal for ongoing CRM initiatives. It realigns earlier proposals on disaster recovery and business continuity and presents an ICT framework and a programme of work for moving forward with a unified approach to disaster recovery and business continuity for Headquarters, offices away from Headquarters, the regional commissions, peacekeeping missions and special missions.

5. The Office of Information and Communications Technology is currently undertaking a structural review of information technology in the Secretariat. This review will investigate the possibility of consolidating ICT units and changes in the structure and staffing levels of the Office. As the review is still under way, the present report has not proposed the establishment of posts while the optimal structure and staff levels are still under consideration. For the biennium 2010-2011, the human resources required for the projects in the report are proposed to be provided through general temporary assistance and contractual services. Any conversion of the general temporary assistance and contractual resources to posts would be proposed for consideration by the General Assembly following the outcome of the structural review.

II. Enterprise systems

A. Enterprise content management: managing the United Nations knowledge base

1. Background

6. A number of the reports of the Secretary-General have highlighted the need for sharing information and knowledge within the Organization. Additionally, the General Assembly, in resolutions adopted during the sixty-third session (resolutions 63/100, 63/248 and 63/262), has requested the Secretary-General and the Secretariat to enhance the technological infrastructure for the management of content; to take full advantage of new developments in information technology to improve, in a cost-effective manner, the expeditious dissemination of information on the United Nations; to ensure the compatibility of technologies used in all duty stations; to explore and report on best practices and lessons learned; and the Assembly has recognized the benefits of the implementation of ECM.

7. In addition to the reports of the Secretary-General, other United Nations bodies have called for an emphasis on the use of knowledge-sharing techniques. A 2006 report of the Office of Internal Oversight Services (OIOS) on the thematic evaluation of knowledge management networks in pursuit of the goals of the Millennium Declaration (E/AC.51/2006/2), called for a knowledge management strategy to be developed for the Secretariat, and asked that a unit focusing on knowledge management be designated (see also E/AC.51/2009/4). A 2007 report of the Joint Inspection Unit entitled, "Knowledge management in the United Nations system" (see A/63/140), included similar recommendations.

8. Effective governance is crucial to supporting new approaches for knowledge-sharing. A Working Group on Knowledge Management was set up in the second quarter of 2008 to take on the work previously undertaken by the Secretariat Task Force on Knowledge Sharing. Under the aegis of the Office of Information and Communications Technology, participants from 14 departments and the secretariat of the United Nations System Chief Executives Board for Coordination work on the development of a knowledge management approach for the Organization. In addition, this Working Group serves as a catalyst to collaboration on the use of enterprise-wide applications such as enterprise content management. The Working Group is chaired by the Knowledge Management Service, created within the Office of Information and Communications Technology to implement the knowledge management programme and to plan and coordinate existing and new efforts to capture and share the Secretariat's most important asset: its knowledge base.

9. The report of the Office of Internal Oversight Services on the triennial review of the implementation of the recommendations made by the Committee for Programme and Coordination at its forty-sixth session on the thematic evaluation of knowledge management networks in the pursuit of the goals of the Millennium Declaration (E/AC.51/2009/4) noted that in December 2008, the General Assembly approved the ICT strategy for the United Nations Secretariat that comprehensively addresses knowledge management issues. In that report, OIOS concluded that the newly established Office of Information and Communications Technology Knowledge Management Service represents "a sufficient formal organizational structure and dedicated unit for knowledge management in the Secretariat", and

considered the recommendation to have been implemented. At its forty-ninth session, the Committee for Programme and Coordination recommended to the General Assembly that it take note with appreciation the work done by the new Working Group on Knowledge Management under the leadership of the Office of Information and Communications Technology.[1]

2. Enterprise content management goals

10. The impact that the United Nations is able to make on the world is critically dependent upon the quality of the information it collects, collates and publishes, as well as the knowledge of its staff. Better communication networks, increased access to information owing to technological infrastructure, and the Internet, have changed the way the United Nations carries out its work. The potential for disseminating consolidated data and knowledge is enormous, but taking advantage of these untapped resources calls for a re-evaluation of the Secretariat's information management work processes. Additionally, it requires change management and innovative approaches to enable United Nations stakeholders to carry out their work effectively.

11. Critical components of the knowledge management programme include: providing the appropriate information technology tools, with ECM as the core system that will support the management of content and information; changing cumbersome processes; eliminating silos and championing collaboration; developing an approach to capture and use lessons learned; and setting up training programmes focusing on knowledge-sharing. To respond to the needs of United Nations stakeholders, new working methods are required to support the development of innovative products and services.

12. By implementing ECM, the knowledge management programme will make more effective use of ICT to improve the ability of the United Nations to analyse, synthesize and present information, making it more accessible and more easily used by its different stakeholders around the world, and ensuring that accurate, trusted, and must-have information supports timely decision-making. The programme will also encourage the development of new knowledge-sharing skills and approaches including the adoption of Organization-wide standards and technology applications that facilitate working together.

13. A substantial investment in organizational development and business process change is needed to ensure that the United Nations captures and uses its information effectively, with the support of information technology and knowledge management applications and policies.

14. The present report focuses on ECM as the enabling component that will support the overall knowledge management programme for the Secretariat.

3. Enterprise content management project

Rationale

15. The Secretariat has spent significant resources in the production, management and distribution of rapidly increasing amounts of documents and other information

[1] See *Official Records of the General Assembly, Sixty-fourth Session, Supplement No. 16* (A/64/16), para. 71.

in various formats. However, many of the processes and systems currently utilized in managing this information are ineffective, inefficient, redundant and vulnerable.

16. The multiplicity of information systems in duty stations across the United Nations Secretariat has led to a patchwork of fragmented, support-intensive, home-grown systems that are not efficient or sustainable. Too often, efforts are duplicated, and departments and offices use different approaches and technologies, with a variety of processes to manage information and content. Maintaining multiple tools has a direct impact on the Organization in terms of support costs that include hardware, software, administration, training and help desk support. Furthermore, this fragmented approach results in information silos and inconsistent policies on information management. As a result, United Nations stakeholders and staff have enormous difficulties in finding the information they need.

17. The following three examples are used to illustrate some of the knowledge management issues facing the United Nations today:

(a) *Websites*. A number of reports and General Assembly resolutions have underlined the issues around management of United Nations websites, including the lack of governance and organizational branding, duplication of efforts, the multiplicity of web-authoring tools, the lack of coordination on domain names, and non-existent mechanisms for content approval and validation. While some offices will spend considerable resources to develop attractive and useful websites, others may assign responsibility for website creation to interns. As a result, the user experience is inconsistent, resulting in a fragmented presentation of the United Nations and its programmes;

(b) *Official Documents System*. Currently the processing and management of official documents is supported by several systems, including eDOC, UNBIS, LotusNotes databases, and the Official Documents System (ODS). Each application has been developed independently, generating duplicate and parallel processes, and resulting in significant inefficiencies. Separate systems have been developed to manage similar processes, at offices away from Headquarters.

(c) *Records management*. Records management capacity across the Organization has, in the past, been inconsistent, weak, and fragmented; a number of business units have no comprehensive records management practices in place. This has led, at times, to vulnerabilities and failures in accountability, transparency, information security, business continuity, and loss of institutional memory. The situation has improved over the past few years at Headquarters through the development and implementation of a framework of archives and record-keeping policies, best practice, standards, and guidance. The progressive implementation of this framework across the Organization will lead to reduced operating costs, improved efficiencies and productivity, and more informed decision-making;

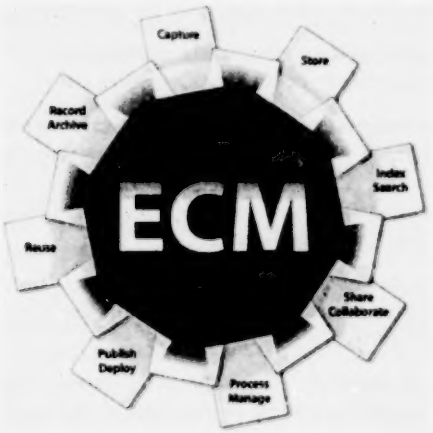
Scope

18. The Knowledge Management Service will plan and coordinate the approach for the deployment of ECM, in cooperation with the departments and offices of the Secretariat, as well as the field. As an enterprise system, ECM will benefit the entire Organization in the management of its information and knowledge, and will be governed by a set of policies. ECM modules will be made available to all duty

stations and field missions to either create and manage their own information or to access information created by other duty stations.

19. Typically, an enterprise content management is comprised of a series of modules, including document management, records management, digital assets management, web content management and collaboration tools. In addition to these core modules, more specific components can be deployed for, inter alia, the management of correspondence, legal cases, and electronic forms. ECM allows an organization to perform a number of activities, as illustrated by figure I below.

Figure I
Functions of an enterprise content management system



20. Enterprise content management will enable the Secretariat to manage more effectively and efficiently its intellectual assets, as well as the ever-increasing amount of content the Organization produces in a variety of media, such as official documents, records, websites, e-mail, photos, images and audio-visual materials. ECM will address the creation, capture, storage, preservation, and delivery of these diverse materials.

21. The ICT strategy for the Secretariat includes many enterprise-wide projects, such as ERP (Umoja), and the CRM project. Because of the need for tight integration between enterprise systems, ECM will be implemented in a manner that integrates with CRM and ERP.

22. Enterprise content management is a multi-year project, the deployment of which will be conducted over a five-year period.

Benefits

23. Implementing ECM in the Secretariat will help to create a more effective Organization whose stakeholders will be better served.

Improved effectiveness

24. **Better and consolidated access to the United Nations body of information and knowledge**. ECM will make information better organized, accessible, and searchable through the implementation of policies, standard taxonomies, common metadata[2] and consistent labels. Consolidation of repositories, including ODS and websites, analysed real-time data, along with collaboration tools — including visualization tools, productivity-monitoring tools, dashboards — will allow for the sharing of collective knowledge and experience, as well as lessons learned. This results in:

(a) *Faster decision-making*, which, according to market research,[3] can yield substantial savings;

(b) *Staff time saved*: according to industry estimates, managers may spend as much as 20 per cent of their time[4] searching for information;

(c) *Increased responsiveness of the Organization* to external events as a result of having consolidated access to information.

25. **Improved management of organizational records**. Together with the existing policies defined by the Archives and Records Management Section, the implementation of the ECM records management module will support the deployment of a Secretariat-wide records management programme based on record keeping best practices. This results in:

(a) *Increased transparency and accountability*. The improved traceability of its records will result in increased transparency in the business of the Organization, and enhance accountability;

(b) *Support to business continuity programme*. With the identification and protection of vital records, a critical component of business continuity planning will be ensured;

(c) *Increased efficiencies*. Expansion of the existing records management programme to all duty stations will increase efficiency as non-essential materials will be disposed of — thus eliminating the need for costly management and storage.

26. **Increased information security**. By establishing clear ownership of content and audit trails of access and reuse of content, ECM will provide security for information assets and enable the Secretariat to ensure secure, remote access to relevant information to all stakeholders, including Member States, permanent missions, and staff. This results in:

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[2] A taxonomy is a particular classification, arranged in a hierarchical structure; it is an information management tool used to organize content and information. Metadata provide information about a certain item's content; for example, a text document's metadata may contain information about the document's length, author, language and date of publication.

[3] A March 2008 report by Cap Gemini United Kingdom entitled "The Information Opportunity" estimates the annual costs associated with making crucial business decisions without the correct information reduces performance by an average of 29 per cent (an annual £21 billion in administrative costs across the public sector).

[4] According to a January 2007 online survey conducted by Accenture in large companies in the United States and the United Kingdom, "Managers spend up to two hours a day searching for information, and more than 50 per cent of the information they obtain has no value to them".

(a) *Protection of confidential information*. Access to information will only be granted following a proper authentication process;

(b) *Information availability when and where needed*. Ensuring secure access to information allows the provision of remote access at any time and place;

(c) *Further supporting business continuity*. Enhanced security provides the ability to access information during crises or when staff is travelling or on mission.

27. **Improved legacy knowledge capture**. ECM will enable the coherent documenting of processes and the capture of best practices and lessons learned so that the work of the Secretariat is streamlined and preserved for future generations. ECM will provide the platform that will leverage work accomplished by some departments and offices in supporting communities of practice and systematically capturing lessons learned, such as the "Best Practices Toolbox". This results in:

(a) *Ensured retention of institutional memory*. Such a repository allows staff to find historical experience, and to have access to properly managed records;

(b) *Reduced duplication of organizational efforts*. Such a repository allows staff to learn from and take advantage of the experience of others.

28. **Improved Internet presence**. Improved organization of content, enhanced and consistent design and the use of the ECM web content management module will allow consistent, real-time updating and harmonization of design to address the problem of website fragmentation and inconsistent organizational branding. This results in:

Improved United Nations image. This will help to promote and advocate for the work and goals of the United Nations.

Increased efficiency

29. **Standardization and simplification of information creation and management**. The ECM implementation will enable standardized and simple information creation across departments, offices and duty stations in the Secretariat. It will enable consolidated, coordinated approaches and streamlined processes for the creation and management of information. This results in:

(a) *Better resource utilization*. This will occur through the consolidation and reduction of technologies supported. Fewer resources in terms of staff and equipment will be required by avoiding duplicative technologies and it will be easier for stakeholders to determine which tools to use;

(b) *Enable re-use of information and elimination of duplicate information*. By supporting content re-use, ECM will allow staff to devote more time to ensuring consistency, accuracy, and timeliness of information, rather than duplicating efforts. Productivity gains in content re-use are supported by industry research.[5] An example of this improvement is the portal for Member States, deleGATE which consolidates iSeek and other relevant content;

[5] "A report from analyst firm IDC states that 70 per cent of enterprise content is recreated rather than reused, making companies spend two times the resources for one set of data." *Industry Week* (1 June 2007).

(c) *Increased accuracy of information*. Changing information in one place will automatically initiate updates in other areas;

(d) *Improved productivity of staff*. The use of a common system across multiple functional groups will increase productivity. As staff move between departments and duty stations, using the same tools will save transition time and staff will have more time for other tasks. To illustrate, if 10,000 staff members save one hour of time a week using ECM, the United Nations would have per year an additional 660,000 hours, or 218 person-years, for other activities or doing essential activities in more depth. This benefit is supported by industry research;[6]

(e) *Reduced storage requirements*. ECM can reduce or avoid costs for many areas associated with paper filing, including the costs for storage space, materials (e.g., paper, folders, cabinets), and labour. In particular, ECM reduces the labour costs associated with the problem of misfiles that are common in paper files. Additionally, both paper and electronic storage of documents will be reduced through the elimination of redundant and obsolete content. This will be achieved by having consolidated and central access to various content repositories, and by ensuring timely disposal of obsolete content by embedding disposal or archiving rules in the process of creating content.

30. The benefits and efficiency gains listed above will be built upon in subsequent years through the introduction of additional initiatives as part of the knowledge management programme, and the deployment of ECM. Such initiatives include portal technology (which will allow for personalized access to information), the management of multimedia assets, further improvements to the main United Nations website (http://www.un.org), and a comprehensive search mechanism for enterprise repositories.

4. Implementation plan

31. The ECM project will be implemented in incremental phases. Following a foundational phase that has defined, inter alia, governance and technical infrastructure requirements, two phases are planned in 2010-2011.

32. A collaborative approach is being taken to determine next steps in the deployment plan. New working models are being considered to ensure that the plan is developed as the result of a participatory process, jointly by the Office of Information and Communications Technology, offices at Headquarters and away from Headquarters, including the field. The approach includes delegating responsibility for the leadership of a particular ECM initiative to a duty station or office that has already developed a specific expertise in that area, such as web content management. Next steps in the ECM deployment will be determined jointly on the basis of priority needs, organizational readiness, and the availability of resources. As an enterprise system, ECM focuses on partnerships to ensure benefits to all staff regardless of their location, their occupational group, or the administrative unit in which they report.

33. Setting up partnerships among departments and offices that share common needs for a particular module to be deployed will also be part of the implementation approach. For example, several departments such as the Departments of General

[6] Gartner research report.

Assembly and Conference Management, Economic and Social Affairs, and Public Information at Headquarters, and also the United Nations Offices at Geneva, Nairobi and Vienna, as well as the regional commissions are stakeholders in the implementation of the document management module. By partnering in the implementation effort, limited resources will be leveraged and common approaches and standard processes will be ensured.

34. The successful achievement of knowledge management objectives is closely linked to a number of key success factors. These include:

(a) Definition of the proper framework for the programme, including policies, procedures, technology and people;

(b) Integration of learning and knowledge capture processes with the technologies that enable knowledge;

(c) Identification of sponsors for ECM initiatives who can act as the liaison with the Office of Information and Communications Technology in developing and implementing its information and knowledge management strategy;

(d) Development of a communications and training strategy to support ECM initiatives, in close coordination with other organizational units, such as the Office of Human Resources Management and the Archives and Records Management Section of the Office of Central Support Services;

(e) Identification of target departments and offices for the start-up phase of the programme and identification of short-term wins to illustrate the potential of the programme.

35. Additionally, implementing ECM requires a redefinition of roles and responsibilities to ensure that specialized staff skills are available. As noted by the Committee for Programme and Coordination at its forty-ninth session,[7] a knowledge management programme is more than the development of new information technology tools. The specialized skills of substantive institutional learning managers, such as Best Practices Officers deployed in peacekeeping operations, and information managers will be necessary to properly identify, document, share and leverage information for increased performance. Similarly, the skills of information managers are needed to ensure that appropriate standards are followed to describe and record content in many different formats. Appropriate skills will also be necessary to handle change management, information architecture, website design, usability testing, taxonomy development, metadata management and corporate information quality both for specialized and cross-organizational content management systems.

36. Finally, the ECM project will only be successful if it is supported by all the stakeholders that it will serve. While it is the responsibility of the Office of Information and Communications Technology to develop and provide the appropriate platform for the management of content within the Secretariat, it will be the responsibility of the content owners to adopt and use this platform in their daily work.

[7] *Official Records of the General Assembly, Sixty-fourth Session, Supplement No. 16* (A/64/16).

5. Update on current project activities (foundational phase)

37. The Office of Information and Communications Technology has been leading efforts to lay the foundation for the implementation of ECM systems. This includes defining the governance framework, the technical architecture, and the basic elements for the management of content, including metadata, taxonomy, and simple workflows. This foundational phase also included initial work on the definition of policies, standards and procedures to oversee and enable the global knowledge management programme.

38. The ECM governance and programme management framework have identified required structures, policies, standards, roles and responsibilities for the coordinated implementation of ECM across Secretariat units. Further, the ECM road map has identified the main Enterprise Content Management priorities across major stakeholders and has proposed a sequence of implementation initiatives based on organizational priorities, business readiness and impact. Through the global deployment architecture, various architectural options to support the global deployment of ECM applications have been considered.

39. The Office of Information and Communications Technology has ensured the participation of major stakeholders including: Archives and Records Management Section of the Office of Central Support Services, the Department of Economic and Social Affairs, the Office for the Coordination of Humanitarian Affairs, the Department of Peacekeeping Operations, the Department of Field Support, the Office of Human Resources Management, the Department of Public Information, including the Dag Hammarskjöld Library, OIOS, the Department for General Assembly and Conference Management, the United Nations Offices at Geneva, Nairobi and Vienna and the regional commissions.

40. Core descriptive elements (metadata) and classification (taxonomy) which the Organization will use for all content types have been defined, with the goal of developing standard information management tools for the description and organization of content.

41. In addition to some strategic initiatives of the knowledge management programme outlined in the report of the Secretary-General (A/62/793) that are already under way, a number of initiatives which constitute a first building block for all future initiatives, such as: (a) a correspondence management system for the Executive Office of the Secretary-General; (b) the production of iSeek news using the web content management module; and (c) the use of a collaboration tool, which allows teams to work collaboratively and share ideas and documents, by several units within the Secretariat.

42. This collaboration tool has also been chosen as the replacement technology for Candiweb — the Member States-dedicated website that supports the work of election officers — as well as for the sharing of information by peace operations military staff, and medical personnel needing to jointly produce documents and share information on the H1N1 pandemic. The communities of practice established by the Department of Field Support in various specialized areas of peacekeeping have also demonstrated their knowledge-sharing potential, along with the Peace Operations Intranet, which provides a central repository for all peacekeeping policies and best practices materials.

6. Planned project activities for 2010-2011

43. A number of ECM initiatives have been identified and prioritized as part of the foundation work undertaken during the current biennium. These initiatives will be built upon incrementally such that achievable building blocks are included in the project plan, minimizing risk and accelerating the realization of benefits. Upon the completion of each initiative, a review and evaluation will allow for leveraging lessons learned and best practices for future initiatives. The next two phases, covering the period 2010-2011, are outlined in figure II below.

Figure II
Project timeline

Project timeline
2009
2010
2011
2012 - 2013
Foundation
Phase I
Phase II
Future Phases
• Management: policies, governance, change management, communication plan
•Collaboration: tool consolidation, institutional memory wiki, correspondence and case management
•Content Management: basic document repository, workflows, records management, ODS migration
•Web Content Management: regional commission websites, iSeek intranet
•Infrastructure: primary hubs
•Management: centres of excellence, partnerships
•Collaboration: correspondence and case management expanded, communities of practice, search, social networking
•Content Management: ODS migration, document publishing, records management expansion, forms management
•Web Content Management: Offices and departmental websites
•Infrastructure: regional hubs and caching

44. Phase I, to be conducted throughout 2010, will focus on those initiatives and activities that would provide value for all Secretariat stakeholders. Phase II, which will be further articulated based on the results and lessons learned in phase I, will be conducted throughout 2011. This phase will increase the knowledge management capabilities and expand them further throughout the Secretariat. Table 1 below presents a summary of all planned activities, during the biennium 2010-2011 irrespective of funding source, and presents the main project tracks and expected results following the implementation of each activity.

45. For increased efficiency and effectiveness of peacekeeping operations, complementary projects for enterprise content management technology, outlined in the report of the Secretary-General (A/63/767 and Corr.1), will be funded from the 2009-2010 support account for peacekeeping operations approved in resolution 63/287. These projects will be implemented to address peacekeeping reporting process automation, replacement of the existing peacekeeping guidance content repository and enhancement of collaboration capabilities throughout field missions.

Table 1
Summary of planned project activities for 2010-2011

	Phase I — 2010	*Phase II — 2011*
Management track $873,700	- Implement policies, procedures and standards under the coordination of the enterprise content management governance -Initiate communication plan as part of change management so that stakeholders can adapt to upcoming business process changes - Develop and initiate an organizational learning programme - Initiate the creation of interdepartmental partnerships with the building and enabling of centres of excellence	- Continue to enable interdepartmental partnerships - Further execute the communication plan
	Results: • *Policies, procedures and standards will have been implemented to guide knowledge management practices* • *The execution of a communication plan as part of the change management process will be completed* • *The system of centres of excellence will have been determined and partnerships established*	
Collaboration track $1,854,400	- Increase the capacity of available technologies for collaboration - Retire duplicated collaboration tools and spread the use of a common collaboration tool eRoom and wiki technology - Collaborative wiki technologies will be introduced to capture the institutional knowledge of how to work at the United Nations, as the complement to the existing intranet, iSeek - Introduce systems to facilitate the management of correspondence and case management - Develop communities of practice	- Extend the deployment of correspondence and case management tools - Improve search and social networking capability of the Organization - Further expand the communities of practice
	Results: • *Collaboration tool supporting knowledge capture (wiki) will be operational throughout the Secretariat* • *Implemented correspondence management tool in the Executive Office of the Secretary-General and several other organizational units* • *Situation reports implemented in field missions* • *Peacekeeping reporting framework and Guidance Content Repository initiatives implemented*[a] • *Case management introduced in OIOS, Department of Peacekeeping Operations/Department of Field Support Conduct and Discipline Units*[a] • *Communities of practice generalized throughout the Secretariat* • *Initial version of federated search introduced* • *Social networking implemented*	

[a] Funded through the Support Account (2009-2010).

Content management track $3,812,700	- Enable Secretariat-wide web-based document storage as a replacement of shared drives, with check-in/check-out, versioning, search and simple workflows for managing content - Deploy the use of a common taxonomy and core metadata in the storage and retrieval so information is more findable across the organization - Enhance institutional records management and archival capabilities - Initiate migration of ODS content to ECM and enable document production and publishing process for official documents	- Finalize the ODS migration - Initiate the expansion of capabilities of content management to departmental publishing - Improve workflow capabilities to include forms management and forms approval processes - Expand records management module deployment
	Results: • *A system for the basic management of content will be available to all departments, offices and field missions* • *Records management module deployed at United Nations Headquarters, field missions, and UN-Habitat*[b] • *Official Documents System migration completed* • *Document management module completed in New York* • *Departmental publishing introduced for the Department of Economic and Social Affairs*[c] • *Electronic forms management implemented*	
Web content management track $2,876,800	-Transform regional commission websites into rich, multimedia knowledge-sharing platforms with a consistent user interface with robust search and content management - Harness experience and knowledge gained in the replacement of the regional commission websites to initiate work on the replacement of the iSeek Intranet	- Develop websites of other offices and department websites for more efficient and effective interaction between various stakeholders through newly designed and branded websites, working with standard templates, effective navigation, appropriate metadata, standardized procedures and fully featured workflows, and multilingual content
	Results: • *New websites developed for the five regional commissions, based on common templates* • *iSeek migration completed* • *Office and departmental website templates developed (United Nations Environment Programme,*[d] *United Nations Office at Nairobi)*	

[b] Funded through the Support Account (2009-2010) and extrabudgetary funding.
[c] To be funded by the Department.
[d] Extrabudgetary funding.

Infrastructure management track $5,130,700	Includes the implementation of ECM global infrastructure and related technologies leveraging technology centres such as the United Nations Logistics Base at Brindisi, Italy, locations for business continuity and duty stations technology centres	Expand the hubs and caching capabilities as required. Needed hardware and software will be administered, upgraded and installed as appropriate
	Results: • *Infrastructure will be in place for Brindisi, including disaster recovery* • *Regional hubs and caching mechanisms will be in place*	

46. Following the deployment of phases I and II, future initiatives will focus upon further implementing the ECM modules, and the knowledge management programme. This includes managing multimedia assets, expanding the benefit of web content management as it relates to the website http://www.un.org — leveraging the work accomplished on the regional commissions and departmental websites. Future phases will also include a comprehensive search mechanism for enterprise repositories, the introduction of portal technology, and of social networking.

7. Funding requirements

47. Implementing, deploying, maintaining and enabling ECM that supports all Secretariat stakeholders is a significant undertaking and resource requirements should not be underestimated. It is expected that the full ECM deployment will take up to five years of project implementation, coordination, change management and training.

48. Enterprise content management will support the whole Secretariat, including Headquarters, offices away from Headquarters, regional commissions and political and peacekeeping missions. Accordingly, the enterprise content management is proposed for funding from the regular budget for the initial implementation across the Secretariat, including offices away from Headquarters and the regional commissions, while the support account would fund implementation at peacekeeping missions. All activities relating to peacekeeping missions (specific projects and roll-out of central solutions) were included under the report of the Secretary-General on the budget for the support account for 2009-2010 (A/63/767 and Corr.1) and hence does not duplicate the request of resources in the present report. The project implementation for the Department of Peacekeeping Operations/Department of Field Support will be conducted in coordination with the work done for ECM in general. If, in the future, departments find that systems that support their functional responsibilities may be improved by further ECM initiatives, the Office of Information and Communications Technology will partner with those departments and work to extend the project to serve the rest of the Secretariat and seek funding, as appropriate.

49. The funding requirements in this report are for the first two years of the implementation plan for United Nations Headquarters, offices away from Headquarters and regional commissions and represents the funding required to implement the core technical infrastructure, many of the key application capabilities and the overall management procedures and guidance to enable a coordinated approach to ECM. The overall estimated cost of the ECM implementation under the

proposed programme budget for the biennium 2010-2011 is $14,548,300 as indicated in table 2 below.

Table 2
Summary of net resource requirements (total project budget at 2008-2009 rates)
(Thousands of United States dollars)

Object of expenditure	*Current estimate*
Other staff costs	3 218.8
Travel	269.5
Contractual services	8 066.4
General operating expenses	1 338.3
Supplies and materials	22.0
Furniture and equipment	1 633.3
Total	**14 548.3**

50. The work related to ECM has been organized into five tracks, as mentioned in table 1 above. The management track ensures that the necessary policies, procedures, standards and oversight are in place and that the ECM work is coordinated by the Working Group on Knowledge Management. The collaboration track covers work related to enabling collaboration capabilities for the Secretariat. The content management track relates to management of official documents, publications and records. The web content management track is related to management of information for websites, including the Intranet. The infrastructure track covering the implementation of the necessary global technical infrastructure to ensure the content managed by ECM is readily available to stakeholders.

51. **Management track**. This track, amounting to $873,700, will address change management and organizational learning for ECM so that stakeholders can adapt to the changes needed for the implementation of ECM in a controlled and effective way. One of the most critical functions will be enabling interdepartmental partnerships with the building of centres of excellence and virtual teams throughout the Secretariat. In addition there will be training for the other tracks, which will be led from the management track. Of the above amount:

(a) $590,400 is proposed for general temporary assistance for 1 P-4 and 1 P-3 for 24 months each. The P-4 would work with the Working Group on Knowledge Management, departments and other governance bodies to develop and implement policies, guidelines, standards and to coordinate all management aspects and align other ECM initiatives. This will also involve developing a coordinated training programme in support of the project. The P-3 is required to perform training and developing training materials for training workshops, train the trainer, online training for distance learning and just-in-time training, self-paced training, user guides and technical documentation;

(b) $7,200 is required for contractual services for service level agreement charges for technology and communication services associated with general temporary assistance positions detailed above;

(c) $118,600 is required for non-post costs such as rent, alterations, furniture and information and communications charges associated with the general temporary assistance positions detailed above, comprising $98,800 under general operating expenses, $2,000 under supplies and materials and $17,800 under furniture and equipment;

(d) Travel in the amount of $157,500 is required for 22 trips for gathering, training and project coordination and management.

52. **Collaboration track.** This track would amount to $1,854,400 for the implementation of a collaboration platform to improve the sharing of information across the Organization, and facilitate the work of cross-functional teams, improve process efficiencies, provide enterprise search capabilities and social networking. It also includes a case management system to be used for the collection, submission, querying, retrieving, monitoring and reporting of information related to cases being investigated by various entities such as OIOS, the Administrative Law Unit of the Office of Human Resources Management and the Office of the Administration of Justice. For correspondence, a system will be implemented to ensure quality and efficiency of correspondence management, with accurate tracking and reporting, while ensuring compliance, integrity and authenticity of information. Of the above amount:

(a) $590,400 is proposed for general temporary assistance for 1 P-4 and 1 P-3 for 24 months each to develop, coordinate, lead and implement the programme related to information-sharing, correspondence management, case management, social networking, search and other collaboration initiatives;

(b) Approximately $1,026,800 would be required in total under contractual services. An amount totalling $1,012,400 would be required for ECM experts to be utilized to conduct requirement gathering workshops, write design documents for the applications, provide programming expertise, conduct system testing, and develop technical documentation. A provision of $14,400 is required for contractual services for service level agreement charges for technology and communication services associated with the general temporary assistance positions detailed above;

(c) A provision of $237,200 is required for the non-post costs such as rent, alterations, furniture and information and communications charges associated with the general temporary assistance positions and the contractors detailed above estimated at $197,600 under general operating expenses, $4,000 under supplies and materials and $35,600 under furniture and equipment.

53. **Content management track.** This track, in the amount of $3,812,700, will enable the development and deployment of multiple initiatives related to content management. A records management system will ensure standardization in the processing of archives and records across the United Nations Secretariat, and will provide capabilities to define retention and disposition schedules, allow for traceability of records, and ensure appropriate security and preservation of critical records. It includes an initiative for the migration of the existing ODS into the ECM platform to ensure a centralized, robust platform, based on a standard taxonomy and metadata model, accessible with the appropriate privileges. Further, a platform would be included for the authoring of parliamentary documents, ensuring that standard preparation processes are followed, streamlined workflows are introduced, and allowing for the tracking of documents. A publishing initiative is also envisaged

that will standardize production methods, codify workflows, integrate collaboration tools, expand opportunities for peer review, streamline clearance procedures, and ensure the availability and integrity of publication assets. Requirements for this track would provide for:

(a) $857,200 under general temporary assistance for 1 P-4 and 2 P-3 for 24 months each to lead the overall coordination and facilitate the business aspects of the content management initiatives, to work closely with the Archives and Records Management Section of the Office of Central Support Services and the business areas to ensure the proper implementation of records management and enable its systematic use within departments and to coordinate with departments on their document authoring needs to ensure the alignment is in place with the ECM platform and coordinating the migration of existing ODS content into a new repository based on ECM technologies;

(b) A total provision of $2,481,100 in contractual service services. An amount totalling $2,452,300 would be required for ECM experts, to be used to conduct requirements gathering workshops, write design documents for the applications, provide programming expertise, conduct system testing, and develop technical documentation. A provision $28,800 is required for contractual services for service level agreement charges for technology and communication services associated with the general temporary assistance positions detailed above;

(c) $474,400 would be required for the non-post costs such as rent, alterations, furniture and information and communications charges associated with the general temporary assistance positions and the contractors detailed above, comprising $395,200 for general operating expenses, $8,000 for supplies and materials and $71,200 for furniture and equipment.

54. **Web content management track.** This track amounts to $2,876,800 and relates to the development and deployment of a platform that will allow for the creation of harmonized web content for the regional commissions and departmental websites. It will codify content workflows, facilitate multilingual content generation, promote integration of content and improve inter-site navigation. Furthermore, it will help to control brand proliferation through the use of standard templates and provide an efficient role-based access control system for content creation and management. It will also provide for the replacement of iSeek with a two-way interactive environment with wiki capabilities for Intranet information. The provision of $2,876,800 relates to:

(a) $857,200 under general temporary assistance for 1 P-4 and 2 P-3 positions for 24 months each to lead, coordinate and facilitate the work on the regional commission website template development and implementation; to gather requirements during that phase of the initiative, and to train and support the users of the system who create websites using the tools and to interface with consultants involved in the requirements gathering and application development;

(b) A total provision of $1,424,500 in contractual services. An amount totalling $1,399,300 would provide for ECM experts to conduct requirement gathering workshops, write design documents for the applications, provide programming expertise, conduct system testing, and develop technical documentation. A provision of $25,200 is required for contractual services for

service level agreement charges for technology and communication services associated with general temporary assistance positions detailed above;

(c) $415,100 for non-post costs such as rent, alterations, furniture and information and communications charges associated with the general temporary assistance positions and the contractors detailed above, comprising $345,800 for general operating expenses, $7,000 for supplies and materials and $62,300 for furniture and equipment;

(d) A further $180,000 under furniture and equipment would also be required to acquire the enterprise-level software to ensure proper evaluation of website performance and allow for appropriate reporting on website usage.

55. **Infrastructure management track.** This track would amount to $5,130,700 and cover the necessary technical server and software infrastructure to make ECM capabilities readily available for all stakeholders. The estimates are based on the current infrastructure capabilities in the Secretariat and will utilize the existing telecommunications and computer operations for all offices of the Secretariat. The primary ECM site will be operated from the United Nations Logistics Base (UNLB) at Brindisi, Italy. With content management applications, the files can be quite large and in order to provide adequate performance for the stakeholders, there is a need for regional hubs and caching mechanisms. There will be additional infrastructure in other locations to support the regional needs of the Organization. The entire technical infrastructure will work in a coordinated and federated environment with local support, overseen by centralized management. This amount comprises the following:

(a) $323,600 for one general temporary assistance position at the P-4 level for 24 months to coordinate the global implementation and administration of the ECM software around the world. This includes the major hubs and caching servers around the world, and working with local staff to properly administer them;

(b) Contractual services totalling $3,126,800 consisting of:

(i) $933,700 for professional services to properly design, configure, install and support the hardware and software components;

(ii) $1,084,000 for network storage services;

(iii) $1,105,500 for maintenance costs of the ECM software licences. Licences for peacekeeping operations are not included as they were budgeted in the 2009-2010 support account budget approved in General Assembly resolution 63/287;

(iv) $3,600 is required for contractual services for service level agreement charges for technology and communication services associated with the general temporary assistance position detailed above;

(c) Travel in the amount of $112,000 is required for the planning, installation and upgrade of the technical environment. This involves four trips each year for two people from the project team to and from Brindisi and offices away from Headquarters and the regional commissions;

(d) A total provision of $1,266,400 under furniture and equipment is required to acquire and maintain the necessary hardware equipment to support the various offices away from Headquarters and regional commissions ($1,257,500) and the

costs associated with the furniture and equipment for the general temporary assistance position detailed above ($8,900);

(e) $300,900 is required for the general operating expenses such as rent, alterations and maintenance of equipment and $1,000 is required for supplies and materials.

B. Customer relationship management: integrating global service delivery

1. Background

56. Customer relationship management consists of the processes and supporting technology a large organization uses to track and organize its customer information. The CRM system is used to support and store the customer interactions which can be accessed by the providers of services as well as the users of services in the organization. A successful CRM effort includes not only software implementation but also improvements in work processes to manage the provision of services.

57. Customer relationship management at the United Nations Secretariat is a key element of the resource management programme, which is one of the three strategic programmes of the ICT strategy report (A/62/793 and Corr.1 and Add.1). The CRM initiative seeks to implement service-delivery and workflow-based applications to improve the handling of the numerous day-to-day services and the effective management of United Nations resources related to service management.

58. The primary objective of CRM is to improve the quality and cost-effectiveness of services provided to end-users, which includes a wide range of customers and constituents, including Member States and other stakeholders as well as the external organizations and the public (see A/62/510/Rev.1). Recognizing the benefits of the implementation of CRM, the General Assembly, in section III of its resolution 63/262, requested the Secretary-General to continue to implement those applications throughout the Secretariat, as appropriate.

59. The present report provides an overview of the current and intended use of CRM in the Secretariat as requested by the General Assembly. It outlines the CRM plans under which the Office of Information and Communications Technology has begun to implement the various improvement efforts. The report further outlines project opportunities across the Secretariat, including initiatives that form the scope of the investment requested for the next biennium.

2. Customer relationship management goals

60. Customer relationship management is an enterprise-wide approach to not only acquire and use knowledge about customers, but also to improve and automate the business processes that deliver value to the Organization's customers.

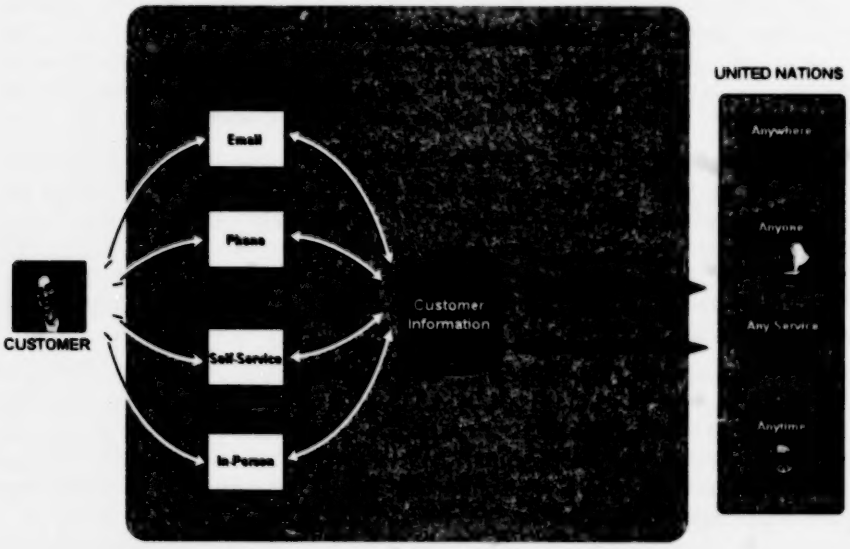
61. The vision of the CRM project is to create an Organization-wide common service management framework that provides improved services with greater efficiency and effectiveness to the end-customers. The goal of the project is to implement this framework by providing an integrated technology platform for managing the service delivery life cycle based on standardized business processes and leveraging industry best practices such as Information Technology

Infrastructure Library (ITIL) and International Organization for Standardization (ISO) standard 20000.

62. Information Technology Infrastructure Library is a set of concepts and policies for managing information technology (IT) infrastructure, development and operations. It is essentially a collection of volumes detailing a number of "disciplines" and processes for IT Service Management. While ITIL offers individual certification, ISO 20000 is an organizational certification. As an internationally recognized standard, ISO 20000 provides ICT good practices for managing and improving ICT. It also provides auditors with a documented standard to use for measuring ICT compliance with ISO standards.

63. The combination of policies, processes, and strategies implemented by the Secretariat will unify its customer interactions across various channels and enable uninterrupted service provision. The future state of accessing any service from anywhere using any channel can be illustrated in figure III below.

Figure III
Global customer interaction with customer relationship management



64. While the ERP (Umoja) system will streamline and automate the core financial, administrative and management operations of the Secretariat, the CRM system will deal with the specific processes connected with providing day-to-day services for end-users. There is no overlap. The selected CRM software is also compatible with the ERP software to be implemented and will integrate with it.

3. Customer relationship management project

Rationale

65. The current practices of various service providers in the Secretariat are described below and are typical of organizations that realize the need for initiating change.

Silo operations

66. Each service delivery group provides independent services for various functions such as ICT support, administrative support for operations in human resources, travel services, payroll, insurance, and also provides diverse services to Member States and agencies. This has led to each business unit or department following their own approach to service delivery and maintaining independent applications and support centres. This lack of an Organization-wide view of service delivery and the presence of multiple providers and purchasers has increased the risk of inefficiencies in the Secretariat and sub-optimal procurement of common services. The disparate service providers, following their own processes and standards, subject customers to different processes and response times for services such as movements, ICT services, insurance, tax, and so on.

67. **Redundant and inconsistent information.** Silos across the Secretariat create different standards for the amount of data needed for a service often requiring similar information by each service. The customer may need to repeat the same information for each new service request with each different service provider. For example, while one service desk may require several pieces of information, another service desk providing the same service in a different office may require only part of that information. This disparity also creates issues when consolidating data about the customer at the enterprise level.

68. **Poor visibility of the service delivery status**. Many departments and offices work with a transactional mindset rather than being customer-centric (focused on customer expectations, needs and satisfaction). Customers do not have a consistent view of how their service request is being handled. Customer-focused service providers should have a history of the customer requests and use this knowledge to fulfil the customer's needs based on this holistic view (i.e., not just on the last interaction).

69. **Lack of communication**. The silo environments and non-standard service processes create obstacles for communication between service providers. In the example of a new staff member joining an organization, a multitude of communications (phone, e-mail, fax and in-person visit) and multiple service requests occur simply owing to the lack of the sharing of common information. Ideally, in a customer-centric environment, on-boarding a new staff member would require one initial event from the customer's perspective that automatically triggers requests to all related service providers of the event.

70. **Inconsistent business processes and customer experience**. Working in organizational and process silos and having different applications to manage day-to-day activities has resulted in complex, multiple-provider environments and different customer experience across channels, thereby resulting in a higher degree of inefficiencies across the Secretariat. Customer experience varies greatly depending on the business unit or department.

71. Without the implementation of consolidated service delivery in CRM, the Secretariat may be exposed to the following risks:

(a) *Higher cost of maintaining silo service desks*. The individual service groups operate with inconsistent processes that result in large gaps in overall user satisfactions as shown by the organization-wide ICT survey. The Organization is burdened by higher costs associated with the maintenance of the different applications and business processes that are used and managed by the separate service group;

(b) *Reduced flexibility for changes across IT and facilities service delivery*. Current silo processes demand that any Organization-wide changes to business organization or structures create a large amount of additional work for each separate group to make the necessary application, data and business process changes. New sets of United Nations standard operating procedures and training would need to be created and communicated to the separate service groups. Repetitive work would need to be done by each individual service group to accommodate their organization's service delivery method;

(c) *No transparent reporting on service delivery and customer satisfaction across IT and facilities provider organizations*. Different metrics and reports are created across service groups in order to evaluate the service delivery standards and customer satisfaction. Functional managers are unable to see easily a complete picture of the service delivery, issues, and cost risks across the service groups for common services. Obtaining an organization view on the delivery levels for a specific service would be very labour intensive in terms of collecting and analysing the data;

(d) *Lack of standard service processes means reduced ability to rotate or replace resources*. The ability to rotate resources, based on needs and emergency situations, is hindered by the training and learning curve that needs to be done for the different service groups. With different processes in place for providing the same service, transferred resources must be retrained on new applications and business processes and rules, which requires additional time and cost;

(e) *Lower customer satisfaction owing to a lack of customer-focused service providers*. The CRM programme drives a service mindset focused on customer information and efficient use of that information. Maintaining existing inefficient processes and technologies will continue the current low levels of user satisfaction;

(f) *Lower productivity from slower provision of services*. Current delivery time will remain and there will not be opportunities to improve the current operations. The proposed CRM improvements in service delivery will have an increased impact on user productivity.

Scope

72. In order to achieve the CRM goal, the plan is to consolidate, over a period of time, service types based on a common solution. The first initiative, branded as "iNeed", seeks to consolidate ICT services and facilities services. The initial deployment of iNeed is limited to the Office of Information and Communications Technology, Department of Field Support, UNLB at Brindisi, the United Nations Interim Force in Lebanon (UNIFIL), the United Nations Mission in Liberia (UNMIL) and the United Nations Stabilization Mission in Haiti (MINUSTAH) for

automating ICT services, and to the Department of Management (Facilities Management Service) for facilities services. This initial deployment by the end of 2009, is proposed to be followed by roll-outs of this baseline product for the offices away from Headquarters over the next two to three years, resulting in the global adoption of ITIL and ISO 20000 standards. Throughout the consolidation process, there will be opportunities to work on automating additional service types. Consolidation of other service types, such as travel services, human resources and conference services will be taken up gradually, depending on the capacity to consolidate as well as the urgency for the replacement of current systems supporting such types of service.

73. The consolidation of every service type will follow a standard but phased approach:

(a) *Standardize business processes*. This will seek to gain the benefits of common enterprise processes regardless of the department or office;

(b) *Consolidate technology platform*. This is critical in order to address data inconsistencies and drive an efficient operating platform to support the customer access channels and business processes;

(c) *Regional consolidation*. This step is to ensure that regional implementations take advantage of time zone and travel opportunities;

(d) *Global consolidation*. This is the final stage to ensure common global processes with standardized events and supported by common technology.

74. Another key constituency for the CRM system is the permanent missions. By leveraging the CRM system's functional capabilities related to relationship and service management, the Secretariat will explore the possibility of building a Member States service management capacity from both the Headquarters and field perspectives. The project's initial focus will be on analysing the interaction of Member States with the Secretariat, recognizing the various points of contact and doing a preliminary analysis to identify the feasible areas for improvement through automation. The intent would be to deliver business value using the service management framework in consultation with Member States, through the Economic and Social Council Working Group on Informatics, which has been advocating such efforts.

Benefits

75. The new service delivery framework of CRM will result in improvements in the day-to-day operations of the service providers throughout the Secretariat. In turn, this will increase the efficiency and satisfaction of the customers, who receive services from the Secretariat.

76. Customer relationship management improves the quality and cost-effectiveness of services provided to end-users. By aligning technology investments with the expected higher standards of service delivery, it will result in the following benefits.

Increased efficiency

77. **Efficient delivery of services**. Implementation of CRM will help to standardize and simplify the business processes across multiple service providers

and locations in the Secretariat. With this standardization of processes and technology, there is an opportunity to develop a unified global service desk standard and services catalogue. This approach can be used to streamline demands from customers, service levels from providers and support visibility of delivery costs across the Secretariat.

78. **Reduced operational costs**. Eliminating ageing service tracking and delivery applications reduces the number of technologies to be supported. Having a common technology platform across multiple service groups also allows easier data exchange between the service providers and reduces the overall service delivery time. In addition, standardizing software on a common platform across the Secretariat lowers the total cost of licence ownership, allows better support across geographic locations and reduces hardware costs relative to having multiple platforms. The process and technology platform of CRM currently being implemented can be reused, and it will expedite, and lower the costs of, subsequent implementations across the Secretariat.

79. **Improved demand management**. Continuous optimization of processes can help to partially absorb expected increases in future demand without a corresponding increase in the current number of agents working in service management.

80. **Increased staff productivity**. The availability of the self-service technology will minimize manual processes and increase staff productivity. It will allow Web access from anywhere and self-directed issue tracking at anytime. As this is the lowest cost-delivery channel, self-service will reduce costs of service delivery for a proportion of demand that is straight-forward and does not need live person support.

81. **Potential cost savings**:

(a) After consolidating 25 service desks into one,[8] a global telecommunications company realized a 30 per cent reduction in mean time to repair, a 60 per cent reduction in unplanned downtime;

(b) A billion-dollar energy supplier cut service desk costs from $89 to $57 per hour;

(c) A leading financial services firm retired 40 service desk tools, reduced case volumes up to 80 per cent, and, in the first six months, reduced the change-to-incident ratio by 10 per cent;

(d) Much like these companies, the United Nations Secretariat will achieve high return on investment in the processes, technology and resources that enable service excellence over a period of time. Expected benefits from the Customer Relationship Management project are estimated at 10 per cent gain in productivity of "service agents" through reduced time taken to process service requests, and an average of 10 minutes saved per incident for both staff and agent by using self-service.

Improved effectiveness

82. **Process improvements**. With the future deployment of a common technology platform, business processes will become standardized and streamlined with the

[8] "Service desk consolidation cuts costs and increases service quality", *BMC Industry Insights*.

implementation of ITIL, an industry best practice. It will also provide the added benefit of business continuity that mitigates risk due to interruptions in service.

83. **Improved service effectiveness**. The common technology platform will provide management with the ability to report and analyse information better across service providers and services provided. This will lead to better decisions being made about services to be offered to different customers and resources needed to provide them. In addition, the self-service portal on the CRM platform will enable service 24 hours a day, seven days a week, and will provide up-to-date information regarding a customer's service requests.

84. **Increased customer satisfaction**. Consistent use of customer data across the Secretariat will increase information quality. The CRM project will help eliminate redundant data maintenance across service providers and ensure that the providers have a single view of the customer. As the process and technology platform are consolidated and standardized, the customer touch points (channels) will also be simplified across service providers. This improved knowledge of customer needs will improve customer-provider relationships.

85. The benefits of providing a common ICT and facilities service management platform will begin to be realized once iNeed is deployed. The return on investment of this type of project will be achieved once the development is completed, and the project is fully stabilized in its maintenance stage (1-2 years after initial deployment). The benefits of the common service management framework will be realized beyond the Department of Management, the Department of Field Support and the Office of Information and Communications Technology once iNeed is implemented for offices away from Headquarters during 2010-2011.

4. Update on current project activities

86. Currently, the main initiative of the CRM project is iNeed, which is an enterprise solution using the Oracle Siebel technology platform. The first phase of the initiative consists of (a) standardizing processes of the ICT service desks of the Office of Information and Communications Technology and the Department of Field Support, UNLB, UNIFIL, UNMIL and MINUSTAH; and (b) consolidating these Service Desks on one common technology platform. The first phase also includes Facilities Service Desk under the Facilities Management Service of the Department of Management.

87. iNeed will replace the existing legacy systems that are used to manage service requests, incident tracking, and inventories of technology and facility assets. It will also automate manual processes that are currently in practice. For example, an e-mail sent to the Service Desk will automatically be converted to a ticket in the new application.

88. During the initial requirement gathering phase, four core service delivery processes (i.e., incident management, problem management, requests for service, and configuration management) were identified as the priority areas for the initial implementation of iNeed. In addition, project management for special events is also included for Facilities Services Desk. Examples of these processes include requesting a new desktop or a conference room for a meeting, reporting an issue with e-mail or a broken light bulb, requesting a departmental move or hosting a seminar during a General Assembly session.

89. Extensive workshops with representation from each of the seven service desks were conducted to gather detailed requirements for the new system. All the business groups agreed to follow harmonized business processes that are ITIL compliant.

90. Following the requirement gathering phase, the functional and technical design of the system was performed, which involved many more working sessions with the business community to agree on proposed solutions. Subsequently, the project team has been configuring the application and developing new reports based on the agreed design. The design of iNeed has been presented to the business groups and their feedback is being used to fine-tune the application prior to it being deployed.

91. The development effort on iNeed is currently going through intensive integration testing, to be followed by user testing and training, with the go-live scheduled for the last quarter of 2009. Following this initial deployment, a self-service portal will be implemented around the second quarter of 2010, for unified customer service for ICT and facility services resulting in productivity gains.

92. The General Assembly approved $4,029,500 in the support account for peacekeeping operations for 2009-2010 for new CRM initiatives, managing troop contributions and the billing of telecommunications services (see A/63/767 and Corr.1). Using the common CRM solution, the service delivery processes of these operations would be automated to ensure that information moves transparently through the Organization effectively and efficiently.

5. Planned project activities for 2010-2011

93. The future phases of iNeed will include the deployment of ICT and facilities service desks at offices away from Headquarters and the remaining ICT service desks at United Nations Headquarters. Its progressive deployment across the offices of the Secretariat will align all duty stations to the same quality standard. This initiative will assist the entire Secretariat to increase the standard of its service management and, as a direct result, the customers will enjoy higher service delivery from the internal service providers.

94. In 2010-11, the plan is to:

(a) Operate, maintain and stabilize iNeed;

(b) Implement self-service;

(c) Deploy iNeed in five duty stations, which are to be determined before the end of 2009;

(d) Begin analysing the next service type to be deployed using iNeed.

95. A successful CRM implementation needs to consider three important variables: people, processes and technology. The key factors to CRM project success are the following:

(a) *Definition of success*. Measurable expected objectives need to be set and results should be evaluated periodically to gauge the progress against the project goals to implement necessary adjustments;

(b) *Top management support*. Since a CRM project is a strategic initiative, top management must actively support it. Management buy-in is essential, and the

support message should be communicated down to the users. If the leaders of the Organization believe in the benefits the strategy can deliver, it will diminish resistance to change;

(c) *User involvement*. Actively involving the users from the beginning of the project will increase the users' acceptance of the new way of working. The sense of ownership generated by their involvement can significantly boost enthusiasm for the solution and its acceptance;

(d) *Phased approach*. A successful CRM project should follow a phased deployment schedule with each phase focused on a specific business objective and designed to produce meaningful results in a reasonable amount of time. Building momentum and enthusiasm will instil confidence that the long-term goal can indeed be reached;

(e) *Ongoing efforts*. Customer Relationship Management is not an event that ends when a technology project is rolled out, but an ongoing, ever-changing business programme that is an integral part of the Organization's customer-centric business strategy. The success of the CRM project should also be continually monitored and measured long after it is initially rolled out.

6. Funding requirements

96. In application development, both institutional knowledge and technological knowledge are required to deliver solutions satisfying the customers' needs. Although the iNeed initiative was initially outsourced to external vendors due to the induction of a new technology, internal resources have taken over the project as of 2009. In order to pursue its successful path, the CRM project would need to continue to build its internal resources, specifically project management, process, technical and infrastructure architects, to manage its governance and deployment.

97. The funding requirement estimates in this report are to continue with the support of the iNeed system in production, development of the self-service portal and deployment of iNeed to five ICT and facility service desks at offices away from Headquarters. The overall estimated cost of the iNeed development, deployment and maintenance is in the amount of $4,433,000 as indicated in table 3 below:

Table 3
Summary of net resource requirements (total project budget at 2008-2009 rates)
(Thousands of United States dollars)

Object of expenditure	*Current estimate*
Other staff costs	1 286.8
Travel	70.0
Contractual services	2 419.2
General operating expenses	440.4
Supplies and materials	10.0
Furniture and equipment	206.6
Total	**4 433.0**

98. An amount totalling $1,286,800 is proposed for general temporary assistance to provide for one P-4, two P-3 and two P-2 positions for 24 months each for management of the application infrastructure design and implementation. This resource will also manage the application configuration as well as the day-to-day maintenance activities, work with the business communities to perform process gap analysis, functional flow design, functional usability documentation, application testing and user communication activities and assist with the technical design and specifications documentation and unit testing of the development application.

99. Travel in the amount of $70,000 is required for facilitating workshops and user training for each deployment in an office away from Headquarters.

100. An amount totalling $2,419,200 is requested for contractual services. An amount of $2,383,200 is required for specialized contractual services for the project. The resources will be used for project management as well as for functional work such as end-user training, data cleansing, import and migration activities as well as the data integration and ongoing assistance to the user community. A further $36,000 is required to cover the service level agreement charges for the proposed general temporary assistance positions and contractors listed above.

101. A provision of $657,000 is required for support costs to cover rent, alterations and communications and supplies for the general temporary assistance positions and consultants listed above. Requirements of $408,000 are required for general operating expenses, $10,000 for supplies and materials and $206,600 for furniture and equipment including the purchase of the necessary new infrastructure. An amount of $32,400 has been included under general operating expenses to maintain this infrastructure but it will not be required until 2011.

III. Disaster recovery and business continuity planning: a unified approach for information and communications technology

A. Background

102. The General Assembly, in section IV of its resolution 63/262, emphasized the need for appropriate information and communications technology security, disaster recovery and business continuity plans. It also requested the Secretary-General to consolidate systems in central data centres in order to strengthen disaster recovery and business continuity and to minimize the size of local primary and secondary data centres. It welcomed the development of a unified approach to disaster recovery and business continuity activities throughout the Secretariat, and requested the Secretary-General to submit a unified disaster recovery and business continuity plan, including a permanent solution for Headquarters.

103. The purpose of the present report is to propose an ICT framework and a set of principles for a programme of work that forms the basis upon which the Secretariat can proceed further with the General Assembly's mandate to develop a unified approach to disaster recovery and business continuity for United Nations Headquarters, offices away from Headquarters, the regional commissions, peacekeeping and political missions, the International Criminal Tribunal for Rwanda and the International Tribunal for the former Yugoslavia.

104. The present report realigns earlier proposals contained in the report of the Secretary-General entitled "Information and communications technology security, disaster recovery and business continuity for the United Nations" (A/62/477), with applicable mandates reflected in General Assembly resolutions 63/262 and 63/269. The two resolutions provide for additional principles that qualify, change, and/or expand the scope of a number of elements of the disaster recovery and business continuity strategy contained in the report. Those additional principles include the following:

(a) Consolidating systems in central data centres to strengthen disaster recovery and business continuity and minimize the size of local primary and secondary data centres;

(b) Prioritizing systems to minimize cost of disaster recovery and business continuity;

(c) Ensuring the use of enterprise data centres rather than local data centres as far as possible;

(d) Fully exploring the possibilities for consolidating and using the most reliable and cost-effective solution for data storage, business continuity services and hosting of enterprise systems;

(e) Undertaking the classification of critical and non-critical systems of the Secretariat and providing to the General Assembly an inventory of systems classified according to their degree of criticality, at the time of its consideration of the proposal for a permanent secondary data centre;

(f) Re-engineering the applications and data to support the long-term goal of managing data recovery and business continuity in system-wide enterprise data centres and where, from a long-term perspective, it is more cost-effective than hosting them in local data centres;

(g) Ensuring that the level of protection proposed has been subject to a thorough cost-benefit analysis.

105. The present report also proposes a high-level strategy and an action plan to conclude the work being carried out by the Secretariat with a view to producing a unified disaster recovery and business continuity plan for ICT, with related resource requirements.

106. In the light of the recent creation of the Business Continuity Management Unit in the Department of Management, the implementation of disaster recovery and business continuity mandates will be undertaken jointly by the Unit and the Office of Information and Communications Technology. In this connection, the focus of the programme of work of the Unit is on business continuity management, which addresses the planning needed to ensure that the Organization can continue its critical functions under all circumstances, while the focus of the information and communications technology disaster recovery programme of work is on disaster recovery, which is concerned with planning for the resumption of ICT infrastructure and services after a disruption that adversely impacts critical business functions. As such, the Secretary-General's report on business continuity management provides the context for the disaster recovery efforts with regard to ICT.

B. Disaster recovery and business continuity goals

107. The focus of this proposal is on establishing broad principles to ensure the continuation of ICT infrastructure and services critical to the Organization in the wake of a natural or human induced disaster. It assumes the need for more detailed study to address in a granular fashion the larger process of planning and crisis response for resumption of applications, data, hardware, communications, and other IT infrastructure after a major incident or crisis. The study proposed will involve a complex process requiring extensive consultations with business units on matters related to the criticality of ICT systems at each duty station in the Secretariat.

108. The goal is to develop a comprehensive ICT disatser recovery strategy to complement the work being undertaken by the Business Continuity Management Unit on business continuity planning for non-IT operations. The scope of this effort is directed towards the planning, implementation, and ongoing maintenance of suitable ICT backup and recovery with respect to the Organization's mission-critical data, systems and services to be defined by the study undertaken in collaboration with the Business Continuity Management Unit.

C. Information and communications technology disaster recovery project

Framework

109. Following consultations with the International Telecommunications Union, the Secretariat proposes to adopt ISO/International Electrotechnical Commission 24762 (Information Technology — Security techniques — Guidelines for information and communications technology disaster recovery services) as the basic framework for the development of a unified disaster recovery and business continuity plan.

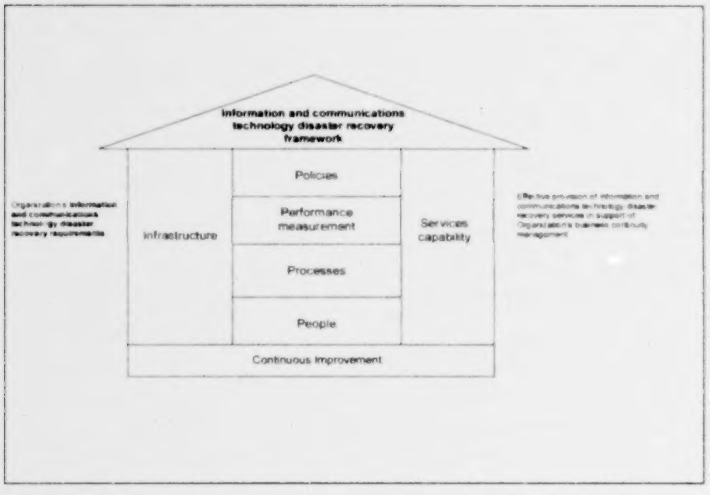
110. The standard provides guidelines for ICT disaster recovery services, which includes both those provided in-house and outsourced. It covers facilities and services capabilities, and provides fallback and recovery support to an organization's ICT systems. It includes the implementation, testing, and execution aspects of disaster recovery. Such fallback arrangements may include arrangements with third parties in the form of reciprocal agreements, or commercial subscription services.

111. The guidelines include the requirements for implementing, operating, monitoring, and maintaining ICT disaster recovery services, divided into two areas: (a) ICT disaster recovery; and (b) ICT disaster recovery facilities.

112. The International Standard is based on a multi-tiered framework comprising different elements in the information and communications technology disaster recovery services provision, as illustrated in figure IV. The "foundation" layer comprises the important aspects of information and communications technology disaster recovery services, namely policies, performance measurement, processes and people. This layer helps to define the supporting infrastructure and services capability.

113. The "continuous improvement" layer highlights practices that help to improve ICT disaster recovery activities in specific areas, and represents an added level of provision to the services provided. Thus the guidelines in this international standard are drawn from a composite view of these layers, and with a balance between cost-effectiveness and standard rigor considerations.

Figure IV
Framework for provision of information and communications technology disaster recovery services



114. "Policies" enable the setting of direction on other related areas of ICT disaster recovery services, and also enable clear communication to relevant parties on the requirements that can be met by an ICT disaster recovery plan.

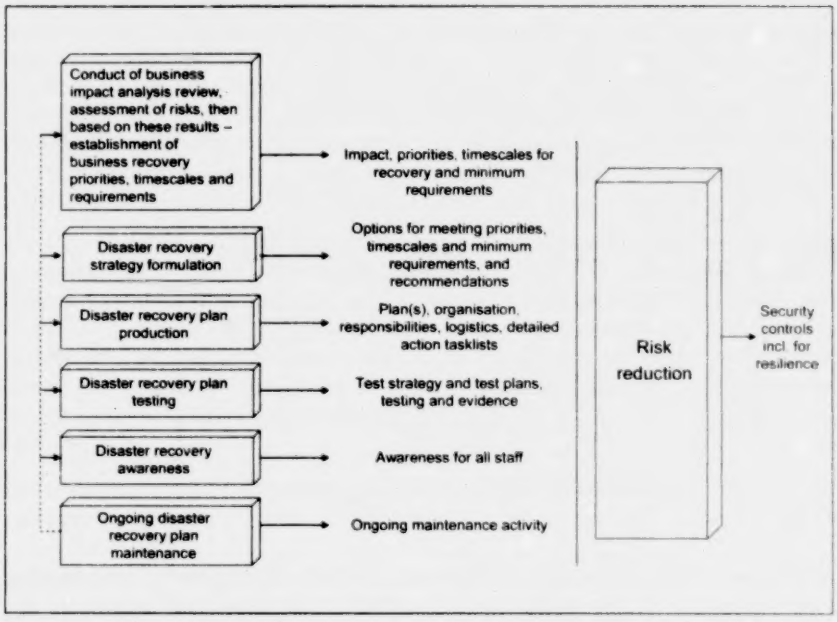
115. "Performance measurement" enables the review and improvement of ICT disaster recovery services and at the same time provides a means to demonstrate that services meet organization requirements.

116. The "processes" component ensures that a consistent approach will be adopted in the other areas of ICT disaster recovery, making possible the continuous maintenance of service levels and the ease of training of ICT disaster recovery personnel.

117. The "people" component relates to the pool of skilled and knowledgeable staff needed to help operate, uphold and maintain an ICT disaster recovery plan.

118. As illustrated in figure V, the overall approach that the Secretariat proposes to follow for the ICT disaster recovery planning consists of a number of discrete stages aimed at achieving a comprehensive and viable disaster recovery plan that fully meets the requirements of the Organization's business units in the event of a disaster or failure.

Figure V
Recommended approach to disaster recovery planning


Conduct of business impact analysis review, assessment of risks, then based on these results – establishment of business recovery priorities, timescales and requirements
Impact, priorities, timescales for recovery and minimum requirements
Disaster recovery strategy formulation
Options for meeting priorities, timescales and minimum requirements, and recommendations
Disaster recovery plan production
Plan(s), organisation, responsibilities, logistics, detailed action tasklists
Disaster recovery plan testing
Test strategy and test plans, testing and evidence
Disaster recovery awareness
Awareness for all staff
Ongoing disaster recovery plan maintenance
Ongoing maintenance activity
Risk reduction
Security controls incl. for resilience

119. The first five stages shown in figure V above are consecutive. When a disaster recovery plan has first been produced and tested, the sixth stage follows on over time, and is conducted at regular intervals and after any significant changes that might affect the validity of the plan, revisiting any of the other stages for update purposes as is necessary. In other words, it becomes an ongoing, cyclical process that must be integrated into the work programme of the Organization. The seventh stage is conducted in parallel with the other stages.

High-level strategy

120. The high-level strategy being proposed for the disaster recovery component of a unified approach to disaster recovery and business continuity takes into account all the following critical components of ICT infrastructure required for the continued support of mission-critical systems and services — desktop clients, mobile devices, networks, and data centre (computing) infrastructure. The first two components, desktop clients and mobile devices, will be addressed by rationalizing the ICT standards for relevant hardware, software and harmonizing the related practices in all locations. The disruptions in the other two components, loss of data centre services and/or network connectivity, are to be specifically addressed by the ICT disaster recovery plan.

121. The ICT disaster recovery plan will address only the recovery of the critical systems and communications. This scenario assumes that all equipment in the data centre is not salvageable and that all critical telecommunications capability has been lost.

122. Recovery activities will be conducted in a phased approach. The emphasis will be to recover critical systems effectively and efficiently. Critical systems will be recovered over a period of time following transfer of services to the recovery site, based on business recovery requirements to be developed under the proposed programme of work.

123. The plan to be developed will include in its scope the following objectives:

(a) Limit the magnitude of any loss by minimizing the duration of a critical system's service interruption;

(b) Recover data imperative to the operation of critical systems;

(c) Manage the recovery operation in an organized and effective manner;

(d) Prepare technology personnel to respond effectively in recovery situations.

124. With a view towards cost-efficiency, the plan will be guided by a principle of re-use, to the extent possible, of existing ICT infrastructure and facilities. It shall also focus on the consolidation of mission-critical systems in central or enterprise data centres as a means of strengthening disaster recovery and business continuity capabilities Organization-wide.

125. The use of a decentralized incident management model is assumed, whereby teams are to be established at each of the organization's sites and tasked with creating their own unique incident response procedures. Such procedures are to be site-specific to each duty station and coordinated centrally by the Office of Information and Communications Technology. These site-specific management teams are intended to ensure appropriate, timely, flexible emergency procedures for each site.

126. For the purposes of site recovery, the Secretary-General proposes to establish two enterprise data centres in geographically diverse locations; namely, at Brindisi and a second site that is to be determined based on the outcome of the "analysis phase" of the study. The two facilities are intended to host mission-critical enterprise systems and services for the Secretariat, while providing for a range of backup and fail-over capabilities between them in support of disaster recovery and business continuity operations.

127. Towards this end, funding approved under resolution 63/262 is being used in the current biennium to initiate the build-out of enterprise data centre capacity at UNLB. In line with the strategy presented in the report of the Secretary-General (A/62/477), UNLB is to serve as the primary electronic information repository for enterprise systems such as the ERP, ECM and CRM, as well as other mission-critical systems and related data for all duty stations within the Secretariat. This approach is an integral part of the initial phase that will be incrementally expanded to incorporate an all-encompassing disaster recovery and business continuity plan.

128. It should be noted that systems that do not require enterprise-wide access, or that have data protection requirements of zero-data loss, such as closed circuit television archiving for physical security systems, will need to continue to be supported in local data centres at each duty station. Through increased centralization of systems, however, the size of secondary data centres in duty stations should be reduced.

129. The classification and prioritization of data and mission-critical systems are to be addressed during the data-collection phase of the proposed programme of work outlined below. For example, the Department for General Assembly and Conference Management has several systems which do not have disaster recovery arrangements but are likely to be classified as critical. The data-collection phase, undertaken in collaboration with the Business Continuity Management Unit, will include analysis for purposes of classification in terms of criticality, and prioritization for purposes of recovery sequencing.

Proposed programme of work

130. The proposed programme of work for 2010-2011 is to continue ongoing activities on a unified approach to ICT disaster recovery and is based on applicable mandates contained in resolutions 63/262 and 63/269. It is proposed to be carried out in the following three phases:

(a) **Phase I — Data collection:**

(i) Project management (plan, scope and objectives);

(ii) Risk assessment;

(iii) Business impact/gap analysis;

(iv) Business recovery requirements determination;

(b) **Phase II — Plan development:**

(i) Disaster recovery and business continuity strategy reformulation;

(ii) Disaster recovery and business continuity plan modification, development, and/or enhancements;

(c) **Phase III — Testing, monitoring and maintenance:**

(i) Disaster recovery and business continuity plan testing;

(ii) Maintenance of the plan through updates and reviews;

(iii) Periodic inspection of disaster recovery and business continuity plans.

131. The data-collection phase of the project (phase I) is required to undertake further study and analyses to address the General Assembly mandates related to the classification of critical and non-critical systems, the prioritization of systems, and the consolidation of systems in enterprise data centres. It will consider the estimated likelihood of threat occurrence with the cost of specific process and system failures to identify especially important areas on which to focus disaster recovery and business continuity investments. Based on a Secretariat-wide classification of systems in terms of criticality, as requested in resolution 63/269, this effort will focus time and resources on the immediate restoration of only business functions, and their supporting systems, that are absolutely necessary for the Organization to continue to conduct business.

132. Activities associated with the business impact analysis, and the business recovery requirement determination in this phase of the work programme, are to be carried out by the Business Continuity Management Unit, and the results of those

studies will determine the extent to which local primary and local secondary data centres are required at each duty station, as well as their size and scope.

133. The scope of phase II will draw upon the experience of other United Nations entities with regard to disaster recovery and business continuity strategy formulation, solutions design, and plan development. It will address the development of data protection strategies for disaster recovery, and the development of site recovery strategies for business continuity. Also to be included are infrastructure design solutions for data protection and site recovery of mission-critical systems and services enterprise-wide, taking into account the most reliable and cost-effective solutions for data storage, business continuity services, and hosting of enterprise systems.

134. This phase of the work programme will serve to validate the high-level strategy presented here in terms of its alignment with applicable General Assembly mandates contained in resolutions 63/262 and 63/269. It will also result in the development of a comprehensive, unified disaster recovery and business continuity plan for ICT Secretariat-wide. Lastly, detailed analysis arising from studies undertaken in both phases I and II will form the basis for the proposal to be submitted at the sixty-fifth session of the General Assembly for a permanent secondary data centre for United Nations Headquarters.

135. As technology, personnel, and facilities undergo constant change at most duty stations, it is imperative that the resulting disaster recovery and business continuity plan is regularly updated to capture these changes. At the bare minimum, significant business and IT infrastructure changes should be automatic triggers for modification of the plan. These changes include: (a) new mission-critical systems; (b) new server or storage platforms; and (c) changes in organizational structure affecting key business units.

136. The need therefore exists for integration of disaster recovery and business continuity processes into project life cycle and change management processes. The integration of these processes represents critical activities that will need to be added to the broader work programme of the Office of Information and Communications Technology during the monitoring and maintenance (phase III) of this programme of work. Resource requirements for these activities and for periodic testing of plans in coordination with the Business Continuity Management Unit and the Department of Safety and Security will be formulated and submitted to the General Assembly at the sixty-fifth session.

D. Implementation plan

137. The completion of phase I (Data collection) is scheduled for the second quarter of 2010, with phase II (Plan development) projected for completion by September 2011. Full implementation of a unified disaster recovery and business continuity plan is scheduled in late 2011, at which time phase III (Testing, monitoring and maintenance) is expected to commence. Resource requirements for phase III will be presented to the General Assembly at the sixty-fifth session.

E. Project funding requirements

138. Phases I and II activities will require funding in the biennium 2010-2011 for the development of duty station-specific data protection and site recovery strategies, and disaster recovery plans tailored to the threat profiles of each site. It will also require funding for the implementation of disaster recovery and business continuity infrastructure solutions arising from phase II plans. As indicated above, resource requirements for phase III activities will be presented at the sixty-fifth session of the General Assembly, following the conclusion of work on the structural review.

139. Resources are therefore sought in the amount of $3,392,300 under the proposed programme budget for the biennium 2010-2011 to cover projected expenditures for the following phase I and phase II activities associated with a unified approach to disaster recovery and business continuity:

(a) Data collection;

(b) ICT business impact analysis;

(c) Business recovery requirements determination;

(d) Disaster recovery and business continuity plan development;

(e) Data centre infrastructure upgrades for site recovery in UNLB at Brindisi;

(f) Data centre infrastructure upgrades for data protection in UNLB at Brindisi.

Table 4
Resource requirements for disaster recovery and business continuity (at 2008-2009 rates)

(Thousands of United States dollars)

Object of expenditure	*Current estimate*
Other staff costs	384.0
Travel	108.6
Contractual services	2 830.9
General operating expenses	58.2
Supplies and materials	1.0
Furniture and equipment	9.6
Total	**3 392.3**

140. Funding requested in the proposed programme budget for the biennium 2010-2011 consists of two major components. The first component relates to funding for contractual services to undertake a study for the classification and prioritization of ICT systems, as well as the reformulation of a unified disaster recovery and business continuity plan. This study is to be carried out in two phases in collaboration with the Business Continuity Management Unit, at an estimated cost of $1,808,600. A provision of $1,308,600 will support the contractual services and travel to continue studies being initiated at the 12 sites that comprise United Nations Headquarters,

offices away from Headquarters, UNLB at Brindisi, the International Tribunal for the former Yugoslavia and the International Criminal Tribunal for Rwanda. A further $500,000 in contractual services is required to support the strategy reformulation and disaster recovery solution design.

141. The second component of $1,127,300 relates to the ongoing operation of the enterprise data centre in UNLB for a service-level agreement to cover the costs of maintenance of equipment and services.

142. In addition, $384,000 is sought for general temporary assistance at the P-5 level for 24 months as a Disaster Recovery Coordinator.

143. An amount totalling $72,400 is required for the non-post costs such as rent, alterations, furniture and information and communications charges associated with the general temporary assistance position detailed above; included in the standard costs are the expenses of $3,600 for data processing services, $58,200 for general operating expenses, $1,000 for supplies and materials and $9,600 for furniture and equipment.

IV. Conclusions and summary of resources

Conclusions

144. The present report provides an update on the implementation of the ECM and CMR systems and the disaster recovery business continuity initiatives and details the planned project activities for 2010-2011 and their related resource requirements.

145. The report describes how Enterprise Content Management is the foundation for effective knowledge management. Implementing knowledge management requires a global approach, which should address the information needs of United Nations stakeholders, both internal and external. This Organization-wide effort allows for an identification of information gaps that will have to be filled to satisfy stakeholders' needs. Emphasis will then be given to leveraging successes that already have shown visible results, and learning from past mistakes. An incremental approach will be taken to ensure that a critical mass of personnel use existing knowledge, and are involved in collaborative approaches so that, ultimately, the Organization will reap the benefits of more effective decision-making, quicker access to key documents and more targeted services to Member States.

146. The second project, customer relationship management, will improve service delivery across the Secretariat by improving quality and cost-effectiveness of the services provided. With the streamlined service processes and consolidated technology solutions, service providers can utilize their resources more efficiently while users can expect better service with faster turnaround. A unified customer experience with increased productivity gains will be evident to all customers including internal customers, delegates, external organizations and the public.

147. For disaster recovery and business continuity, the present report sets out the framework and a set of principles for a programme of work that forms the basis upon which the Secretariat can develop a unified approach to disaster recovery and business continuity for United Nations Headquarters, offices away from Headquarters, the regional commissions, peacekeeping and political missions, the

International Criminal Tribunal for Rwanda, and the International Tribunal for the former Yugoslavia.

148. The following tables summarize the resource requirements under the proposed programme budget for the biennium 2010-2011 by section and object of expenditure and project arising from the proposals contained in sections II and III of the present report.

Table 5
Summary of resources by project

Name of project	*Proposed resources*
Enterprise content management	14 548 300
Customer relationship management	4 433 000
Disaster recovery and business continuity	3 392 300
Subtotal (net)	**22 373 600**
Section 36: Staff assessment[a]	735 300
Total (gross)	**23 108 900**

[a] Offset by an equivalent amount under Income section 1, Income from staff assessment.

Table 6
Summary of objects of expenditure: resource requirements by object of expenditure for the biennium 2010-2011[a]

		2010-2011				
		Growth				
Object of expenditure	*2008-2009 revised appropriation*	*Proposed programme budget A/64/6*[b]	*Present report*	*Total before recosting*	*Recosting*	*2010-2011 estimate*
Posts	92 929.5	346.5	—	93 276.0	4 742.5	98 018.5
Other staff costs	3 580.9	(182.4)	4 889.6	8 288.1	403.2	13 580.9
Consultants and experts	305.1	0.0	—	305.1	14.8	319.9
Travel of staff	699.3	0.0	448.1	1 147.4	53.1	1 648.6
Contractual services	25 336.7	1 953.5	13 316.5	40 606.7	1 972.7	55 895.9
General operating expenses	116 643.4	(1 209.5)	1 836.9	117 270.8	5 696.6	124 804.3
Hospitality	10.3	(4.1)	—	6.2	0.4	6.6
Supplies and materials	3 306.0	(760.0)	33.0	2 579.0	124.8	2 736.8
Furniture and equipment	5 606.4	(2 949.0)	1 849.5	4 506.9	219.3	6 575.7
Subtotal (net)	**248 417.6**	**(2 805.0)**	**22 373.6**	**267 986.2**	**13 227.4**	**281 213.6**

		2010-2011				
		Growth				
Object of expenditure	*2008-2009 revised appropriation*	*Proposed programme budget A/64/6*[b]	*Present report*	*Total before recosting*	*Recosting*	*2010-2011 estimate*
Staff assessment[c]	510 939.6	1 885.4	735.3	513 560.3	14 779.4	529 075.0
Total (gross)	**759 357.2**	**(919.6)**	**23 108.9**	**781 546.5**	**28 006.8**	**809 553.3**

[a] Requirements relate to the 3 sections of the proposed programme budget detailed in table 7 below.

[b] Growth in the proposed programme budget (A/64/6) does not relate to ECM, CRM or disaster recovery and business continuity activities.

[c] Offset by an equivalent amount under Income section 1, Income from staff assessment.

Table 7

Summary by section: resource requirements by budget section for the biennium 2010-2011

			2010-2011				
			Growth				
Budget section		*2008-2009 revised appropriation*	*Proposed programme budget A/64/6*[a]	*Present report*	*Total before recosting*	*Recosting*	*2010-2011 estimate*
28D.	Office of Central Support Services	175 088.5	(1 594.6)	1 416.8	174 910.7	8 569.4	183 480.1
29.	Office of Information and Communications Technology	73 329.1	(1 210.4)	20 956.8	93 075.5	4 658.0	97 733.5
Subtotal (net)		**248 417.6**	**(2 805.0)**	**22 373.6**	**267 986.2**	**13 227.4**	**281 213.6**
36.	Staff assessment[b]	510 939.6	1 885.4	735.3	513 560.3	14 779.4	528 339.7
Total (gross)		**759 357.2**	**(919.6)**	**23 108.9**	**781 546.5**	**28 006.8**	**809 553.3**

[a] Growth in the proposed programme budget (A/64/6) does not relate to ECM, CRM or disaster recovery and business continuity activities.

[b] Offset by an equivalent amount under Income section 1, Income from staff assessment.

V. Actions to be taken by the General Assembly

149. The General Assembly is requested to:

(a) **Endorse the proposals and approach described in the present report for the implementation of enterprise content management, customer relationship management and business continuity and disaster recovery planning;**

(b) **Approve the funding required to continue the Enterprise Content Management project for the biennium 2010-2011 estimated at $14,548,300;**

(c) **Approve the funding required to continue the Customer Relationship Management project for the biennium 2010-2011 estimated at $4,433,000;**

(d) Approve the funding required to undertake development of a unified disaster recovery plan and to maintain the Brindisi enterprise data centre for the biennium 2010-2011 estimated at $3,392,300;

(e) Approve a total amount of $23,108,900 gross ($22,373,600 net) for the biennium 2010-2011 under section 28D, Office of Central Support Services ($1,416,800) and section 29, Office of Information and Communications Technology ($20,956,800); and section 36, Staff assessment ($735,300), to be offset by a corresponding amount under Income section 1, Income from staff assessment, of the proposed programme budget for the biennium 2010-2011;

(f) Note that comprehensive plans on disaster recovery and business continuity for Secretariat entities including requirements for the maintenance and monitoring phase of the information and communications technology disaster recovery plan will be submitted for consideration in the context of the proposed programme budget for the biennium 2012-2013.